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Islamic World Science Citation Center (ISC): Evaluating Scholary Journals Based on Citation Analysis

Jaffar Mehrad, Sholeh Arastoopoor Regional information center for Science and Technology, Shiraz, Iran

Review

SUMMARY

Introduction: Citation analysis is currently one of the most widely used metrics for analyzing the scientific contribution in different fields. The Islamic World Science Citation Center (ISC) aims at promoting technical cooperation among Muslim scientists and their respected centers based

on these theories. It also facilitates the accessibility of knowledge and research contribution among them. This paper aims at revealing some of the outmost features of ISC databases, in order to give a fairly clear view of what it is and what are its products. The paper consists of three major parts. After an introduction about the Islamic World Science Citation Center, the paper deals with major tools and products of ISC.

In the third part ISCs' journal Submission system is presented as an automatic means, by which users can upload journals' papers into the respected databases. **Conclusion:** Some complementary remarks have been made regarding the current state of ISC and its future plans.

Key words: The Islamic World Science Citation Center; ISC; Scientific contribution; Research Journals;

1. INTRODUCTION

As Vanran (1996) puts it, scientometris is a research field dedicated to the quantitative study of science and technology primarily based on the bibliometrics methods. Due to its nature this field is both problem-oriented and basic. Most of current known citation tools are implemented upon this basic nature. On the contrary most of these problem-oriented studies are conducted based on the grounds of those citation tools. Scientometrics generally is regarded to have four major benefits (Vanran, 1996):

- Developing Methods and techniques for applying quantitative indicators in measuring important aspects of Science and technology;
- Developing information systems;
- Study of the interaction between science and technology;
- Study of the cognitive and socioorganizational structures of scientific fields in relation to societal factors.

Islamic World Science Citation Center (ISC) is basically a Sys-

tem Which Provides Citation analysis based on scientometrics theories. Its first ignition was in 2000 based on a research project called "Persian Journal Citation Reports" conducted (Mehrad & Maghsoudi, 2006). Mehrad and Maghsoudi were the two researchers who worked on the research project and as the dean of Regional Information Science and Technology; Dr Mehrad had the chance to promote the developed system across Iran and also throughout the world. It Was First established by the Iranian Ministry of Science, Research and Technology Just after its approval by Islamic Educational, Scientific and cultural organization (ISESCO) in 2007 in Rabat and also by the 4th Meeting of the Islamic Countries" Higher Education Ministers in 2008 in Baku (Mehrad & Naseri, 2010).

Although the center is located in Shiraz, it aims at promoting technical and scientific cooperation among Muslim scientists and Muslim countries worldwide. It is to prepare a general yet specific map of science and technology in order to make scientific publications accessible throughout the Islamic world. ISC emphasizes on OIC member states' scientific publications but it is its duty to promote cooperation among Islamic countries and also between the Islamic world and other counties as well. ISC benefits from theoretical scientometrics and its aims are served through a fully automated citation analysis. The result would be the ability of measuring the scientific impact of publications. One of ISC's major advantages over other powerful citation analysis tools such as ISI or Scopus is its encompassing mission regarding national languages. Other citation tools and databases do focus on English language journals but there is no doubt that a considerable amount of scientific production is prepared in the national language of the authors in non-English language countries. Thus ISC gives them a chance to disseminate their scientific work through an international channel. Currently a wide range of disciplines are covered in ISC databases among which a considerable number of titles are dedi-

cated to different fields of medicine and health. There are more than 550 titles currently indexed in ISC which deal with the subject and among them about 200 of these titles have gained IF (Impact Factor) according to the automatic citation analysis performed on them. A total sum of 134 English journals in the field of medicine is currently indexed in ISC database. Since ISC is regarded as a young database compared with its powerful siblings (ISI and Scopus), the above figures are promising not only in medical or health publications but also in other fields of study.

2. ISC TOOLS AND SERVICES

Scientific and research journals which are peer-reviewed are selected to be indexed in ISC. These journals are normally published by universities and research centers. Based on this policy, since 2008 the database has received a wealth of worldwide collection. Tables 1 to 3 reveal a glimpse of what currently is the span of ISC's collection.

	1		
No	Language	Num. of Titles	
1	Egypt	16	
2	Indonesia	13	
3	Iran	227	
4	Jordan	9	
5	Malaysia	242	
6	Pakistan	68	
7	Saudi Arabia	34	
8	Turkey	43	

Table 1. Some of the English journals acquisitioned from Islamic countries worldwide

No	Language	Num. Titles	
1	Jordan	160	
2	Egypt	13	
3	Emirates	56	
4	Iran	16	
5	Tunisia	59	
6	Syria	105	
7	Saudi Arabia	87	
8	Iraq	72	

Table 2. Some of the Arabic journals acquisitioned from Islamic countries worldwide

No	Language	Num. Titles	
1	Azeri	7	
2	French	14	

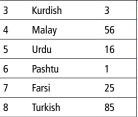


Table 3. Some of the other languages that have been acquisitioned worldwide

It has to be noted that the items displayed in these tables are just a fraction of what have been really collected and there are far more countries and other languages covered in ISC databases. Based on this wealth of knowledge a wide range of tools has been developed.

ISC Science Citation Database, Which is the main Product of ISC and through its simple and advanced search interface, it delivers the fulltext of papers along with their references and received citations. Fig 1(a) depicts the advanced search interface and Fig. 2 depicts a snapshot of the results retrieved.

As it is evident in Figure 1(b) the results could be rearranged based on their relevance, recency, received citations, former papers, and the number of references. Another important feature of this product is each paper's Related Articles which is highlighted above. Related papers are featured hear based on a co-citation analysis.

ISC English journal Citation Reports (EJCR), offers some statistics regarding journals Impact Factor



Figure 1(a). ISC Science Citation Index's advanced search interface



Figure 2. ISC Science Citation Index's retrieved results



Figure 3. A snapshot of English Journal Citation Reports



Figure 4. ISC Current Contents' User Interface



Figure 5. The User interface of ISC Current Awareness Service



Figure 6. A Snapshot of the ISC World's Scientific Contribution Reports



Figure 7. Comparing Scientific Contribution of OPEC Countries with that of OIS's



Figure 8. Journal Submission System's User Interface

(IF) and also their immediacy index. Other services which are available through this product are cited half Life, citing half Life, cited journals, citing journals and average impact

factor for each journal. Fig 3 depicts the interface of the product.

As it is shown in above picture, there are multiple ways through which one can access and manipulate the citation reports in each year.

ISC Current Contents delivers the Contents of each journal received recently. There exists Several Ways in order to access the contents of this database, among which one can mention alphabetical index, search box and also subject list of journals. Fig. 4 depicts a glimpse of ISC current contents' interface.

ISC Citation Current Awareness service is a newly launched service based on ISC Science Citation Index (Fig 5).

With this user friendly service, experts can define their scientific profile and based on their interests they are notified upon any new record that has been added to the database. This System also has this peculiar ability to notify its user upon any new citation received by a paper of interest.

ISC worlds Scientific Contribution Report is a unique tool for analyzing scientific contribution of countries worldwide. These reports are ready to be prepared based on any desired geographical region, from conti-

nents to countries and from regions to different International organization member states. Fig. 6 supports the fact that even bused on indicators such as economic classification, or being an OIC country, OECD country, or even OPEC country, the reports are readily available.

There is also a chance for the user to compare any desired report with another. Fig. 7 depicts a snapshot of the OPEC countries scientific contribution with that of OIC's. This report can be further manipulated based on any required or suitable chart type in different subject fields.

Persian Journal Citation Reports, Persian Essential Science Indicator, Persian Highly-Cited Proceedings Database, and University Rankings of Islamic Countries are among other remarkable products of ISC.

A Facilitated Transaction

For a better interaction with ISC databases and speeding the whole process up, a submission system is newly launched. Journal submission systems in general do have some benefits and added values. Reducing the work load, standardizing the process, making the information coherent and homogeneous, possibility of further automatic analysis/manipulation, processable outputs, and a more facilitated interaction are among their named advantages.

For about 3 years ISC benefited from a semi-automatic journal submission system. But now with an ever increasing workload and a good knowledgebase for migrating from this semi-automatic submission system, the XML based journal submission system is launched (Fig. 8).

The system currently has both English and Persian interface and its Arabic version is currently under construction. In this system as it is depicted in Fig. 9 different information elements regarding different numbers and their respected papers are entered.

After the whole process is complete the user can download a copy of the generated xml file or send the generated file directly to the ISC database (fig 10). Fig. 11 depicts a snapshot of one of these xml files.

From a systems view all this process means a better system interaction along with standard work flow and multi-purpose outputs. Faster



Figure 9. Worksheet for Attaching a Paper to a Specified Journal



Figure 11. The First Part of a Sample XML File

indexing, faster online visibility and use from one side, and further use of XML files on the other side are some of its unique features.

3. CONCLUDING REMARKS

Due to its web-based features, ISC products are available worldwide and due to its functions, ISI and Scopus are interested in further cooperation with ISC. On the other hand, because of its encompassing nature



Figure 10. The Specified Number of the Journal is now Complete and XML File is Ready

different regarding languages, ISC products pave the way for achieving a unique database which provides value-added knowledge about scientific contribution of different Islamic Countries along with the fulltext al their respected journals in their native language. Further more because of the evaluation of universities car-

ried out by ISC more and more organizations are interested in indexing their journals in ISC databases. In other words ISC has provided a robust foundation for projecting scientific journals, scientists and researchers' views on one side and assessing universities and research centers scientific performance on the other side. There is no doubt that ISC still needs more cooperation from Islamic scientific journals, scientists, universities and research centers worldwide, but it is for sure one of the most important facilitators of knowledge cooperation among Muslim countries.

Conflict of interest: none declared.

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Corresponding author: Jaffar Mehrad, PhD.Regional information center for Science and technology.

E-mail:(Dean@srlst.com)